

## Patent claims

1. A heating assembly with at least one PTC element,  
in particular for a motor vehicle, the PTC element  
5 (2) being arranged between contact plates (3, 4)  
which serve for making electrical connection, the  
contact plates (3, 4) and the PTC element (2) being  
bonded by means of an adhesive (5), characterized  
in that the adhesive (5) has a resistivity of at  
10 least 50 ohms  $\times$  cm and at most 500 ohms  $\times$  cm.
2. The heating assembly as claimed in claim 1,  
characterized in that the adhesive (5) has a  
resistivity of at least 80 ohms  $\times$  cm and at most  
15 150 ohms  $\times$  cm, in particular of 100 ohms  $\times$  cm  $\pm$  10%.
3. The heating assembly as claimed in claim 1 or 2,  
characterized in that the layer thickness of the  
20 adhesive (5) between the PTC element (2) and a  
contact plate (3, 4) before enforced relaxation is  
negligible and after enforced relaxation is at most  
0.02  $\mu$ m, in particular 0.01  $\mu$ m  $\pm$  10%.
- 25 4. A heating assembly with at least one PTC element,  
in particular for a motor vehicle, the PTC element  
(2) being arranged between contact plates (3, 4)  
which serve for making electrical connection, the  
contact plates (3, 4) and the PTC element (2) being  
30 bonded by means of a solder, characterized in that  
the solder has a resistivity of at least 50 ohms  $\times$   
cm and at most 500 ohms  $\times$  cm.
5. The heating assembly as claimed in claim 4,  
35 characterized in that the solder has a resistivity  
of at least 80 ohms  $\times$  cm and at most 150 ohms  $\times$  cm,  
in particular of 100 ohms  $\times$  cm  $\pm$  10%.

6. The heating assembly as claimed in claim 4 or 5, characterized in that the layer thickness of the solder between the PTC element (2) and a contact plate (3, 4) before enforced relaxation is negligible and after enforced relaxation is at most 0.02  $\mu\text{m}$ , in particular 0.01  $\mu\text{m}$  +/- 10%.
7. An adhesive or a solder for bonding between a ceramic PTC element (2) and an electrically conducting contact plate (3, 4), characterized in that the adhesive (5) or the solder has a resistivity of at least 50 ohms  $\times$  cm and at most 500 ohms  $\times$  cm.